## Abstract

A bow resistant semiconductor package includes a semiconductor die, a leadframe and a plastic body. The plastic body includes a molded inner member encapsulating the die, and a molded outer member encapsulating the molded inner member. The inner member rigidifies the package, and is dimensioned such that the outer member has substantially equal volumes of molding compound on either side of the leadframe. The equal volumes of molding compound reduce thermo-mechanical stresses generated during cooling of the molding compound, and reduce package bow. With reduced package bow, a planarity of the terminal leads on the package is maintained. Also, stresses on bonded connections between the terminal leads and electrodes on a supporting substrate, such as a printed circuit board or multi chip module substrate are reduced. In an alternate embodiment, the package includes volume equalizing members formed on the leadframe configured to equalize the volumes of molding compound on upper and lower segments of the package body.